POSITION DESCRIPTION, Form 30 - STATE Commonwealth of Massachusetts			POSITION CODE 20-Y13
		AGENCY Department of Public Health	
2. APPROPRIATION CODE 4516-1000	POSITION NUMBER 00018378	SALARY	DATE

3. GENERAL STATEMENT OF DUTIES:

Performs complex chemical analysis of drugs. Operates and maintains complex laboratory instruments. Interprets test results. Performs related work as required

4. SUPERVISION RECEIVED:

Michael Lawler Chemist III

5A. DIRECT REPORTING STAFF | 5B. THEIR STAFF

6. DETAILED STATEMENT OF DUTIES:

Performs chemical identifications of drugs using standard operating procedures to determine violations of narcotic and drug laws, for the courts and agencies of the Commonwealth of Massachusetts. Performs analyses on large quantity cases associated with drug trafficking. Performs complex chemical analyses such as those associated with crack cocaine and psilocybin mushroom analyses. Develops new methods of testing and evaluating drugs and materials, etc. and recommend alternative measures for working with new materials in order to improve performance. Operates complex analytical instrumentation (infra-red spectroscopy, ultraviolet spectroscopy, gas chromatography, gas chromatography/mass spectrometry and high pressure liquid chromatography), microscopes and balances and interprets data from these instruments. Performs routine preventative maintenance on laboratory instrumentation. Trouble shoots instrument problems, performs minor instrument repairs, and works with vendor service technicians on major repairs. Prepares routine laboratory reports. Contributes to a Drug Laboratory newsletter for distribution to Police Departments. Writes standard operating procedures for laboratory analyses and laboratory equipment. Provides expert testimony in courts of law on matters relating to drug analysis. Works with evidence technicians in providing for security and integrity of samples and in issuing reports pertinent to the analysis of such samples. Maintains inventory of laboratory supplies and equipment by determining when such supplies, equipment and chemicals must be ordered, and by writing purchase orders to maintain proper supply levels. Meets with manufacturer representatives to discuss price, availability, specifications, and/or standards of equipment and materials.

7. QUALIFICATIONS REQUIRED AT HIRE:

Knowledge of the terminology and standard abbreviations used in a chemical laboratory. Knowledge of general laboratory techniques and methods including sample collection. Knowledge of the calibration and adjustment techniques applied to the equipment used in a laboratory. Knowledge of the principles and practices of general chemistry, analytical chemistry, organic chemistry, inorganic chemistry and physical chemistry. Knowledge of the structure, composition and nature of matter. Knowledge of the techniques for the handling and transportation of samples and specimens used in a laboratory. Ability to analyze and determine the applicability of chemical test data, to draw conclusions and make appropriate recommendations. Ability to read and interpret such documents as test results and technical manuals. Ability to follow written and oral instructions. Ability to prepare statistical reports. Ability to give oral and written instructions in a precise, understandable manner. Ability to maintain accurate records. Ability to supervise, including planning and assigning work according to the nature of the job to be accomplished, the capabilities of subordinates and available resources; controlling work through periodic reviews and/or evaluations; determining subordinates' training needs and providing or arranging for such training.

8. QUALIFICATIONS ACQUIRED ON JOB:

The operation of several specific analytical instruments (IR, MS, UV). Ability to testify as an expert witness in courts of law.

9. MINIMUM ENTRANCE REQUIREMENTS:

Applicants must have at least (A)three years of full-time, or equivalent part-time, professional or technical experience in the field of chemistry, or (B) any equivalent combination of the required experience and the substitutions below. SUBSTITUTIONS: A Bachelor's degree with a major in chemistry or biochemistry may be substituted for a maximum of two years of the required experience.* A Graduate degree with a major in chemistry or biochemistry may be substituted for the required experience.* *Education toward such a degree will be prorated on the basis of the proportion of the requirements actually completed.

10. LICENSE AND/OR CERTIFICATION REQUIREMENTS:

11. REMARKS: